

EUCERAPHIS WALKER, 1870 (INSECTA, HEMIPTERA); DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS.

Z.N.(S.) 1363

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The present case is concerned with a genus which is clearly based upon a misidentified type-species and the International Commission is asked to use its plenary powers in order that the existing usage of the name may be validated.

2. Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 452) listed but did not describe *Aphis betulae*, with the indication "Habitat in *Betula alba*" and a reference "Fn. Suec. 717".

3. Linnaeus, 1746 and 1761, in *Fauna Suecica* (: 261 of 1761 edition) described *Aphis betulae* as follows: "Habitat in *Betula rarius*. Corpus pallide virens; puncta 4 nigricantia in margine singulae incisurae utrinque. Minima est; caret alis et appendiculis".

4. Zetterstedt, 1828 (*Ins. Lapp.* Pt. 1 : 559) described *Aphis punctipennis*, material of which is still in existence. Von Heyden, 1837 (*Mus. Senckenb. Abh.* 2 : 299) described *Aphis nigritarsis* from birch.

5. Walker, 1848 (*Ann. Mag. nat. Hist.* (2) 1 : 255) described *Aphis betulae* and gave an introductory synonymy in which he included *Aphis betulae* L., *A. nigritarsis* Heyden and *A. punctipennis*? Zetterstedt. His description of *betulae* was followed by those of *Aphis comes* Walker and *Aphis oblonga* Heyden, which were described as similar to *A. betulae*. All three species were of rather large size.

6. C. L. Koch, 1855 (*Die Pflanzenläuse* : 217) described *Callipterus betulae* Koch, a species possessing siphunculi (appendicula of Linnaeus, vide para. 3), and of which Koch said "Vollständig entwickelte Thierchen sind alsdann alle geflügelt".

7. Walker, 1870 (*Zoologist* (2) 5 : 2001) erected a genus *Euceraphis*. His diagnosis was as follows:—"Euceraphis Walk. Type *A. Betulae*, Linn.—*Aphis punctipennis* (Zetterstedt, *Ins. Lapp.* i.2.311) belongs to this genus. It feeds on the birch and on the alder, and inhabits Lapland and Greenland. I have found it on the alder at Chamouni".

8. At least two species of aphids are involved in the above series of descriptions. (a) *Aphis betulae* L., 1758, 1761, a small green species, known to Linnaeus only from the apterous forms, and described as being without siphunculi. The description is nowadays, by some authors, regarded as perhaps applying to a species of *Glyphina* Koch, in which the siphunculi, though present, are very small, and alatae are only produced during a limited period in summer. (b) *Aphis punctipennis* Zetterstedt, 1828, with synonyms *A. nigritarsis* Heyden, 1837 and *Callipterus betulae* Koch, 1855, a large species of which the viviparous forms when mature are always winged, and in which

the siphunculi, though not large, are quite conspicuous. The references to alder as host plant by Walker probably refer to the very similar *Aphis comes* Walker.

9. Walker's 1848 description of *Aphis betulae* agrees perfectly with Koch's description of *Callipterus betulae* (= *punctipennis* Zetterstedt), and there can be no doubt that this insect was what he had before him. Walker's 1870 type fixation for *Euceraphis* has consistently been interpreted as if he had designated *Aphis punctipennis* Zetterstedt as type-species. That this usage is what Walker intended is clear from the fact that he placed *punctipennis* in *Euceraphis*, which he could not reasonably have done had he had before him the true *betulae* L.

10. Walker's intention has almost certainly been correctly interpreted by subsequent workers who have used *Euceraphis* as if its type-species were *Aphis punctipennis* Zetterstedt. It is clearly in the interests of nomenclatorial stability that the application of *Euceraphis* Walker, 1870, should not now be changed by strict application of the Rules and adherence to the nominal species designated.

11. There are no family-group names based on *Euceraphis* which is commonly placed in the family CALLAPHIDIDAE.

12. The International Commission on Zoological Nomenclature is therefore asked :—

- (1) to use its plenary powers to set aside all designations of type-species for the nominal genus *Euceraphis* Walker, 1870, prior to the Ruling now requested and having done so to designate the nominal species *Aphis punctipennis* Zetterstedt, 1828, originally included in the genus by Walker, to be the type-species of that genus ;
- (2) to place the generic name *Euceraphis* Walker, 1870 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Aphis punctipennis* Zetterstedt, 1828, on the Official List of Generic Names in Zoology ;
- (3) to place the following specific name on the Official List of Specific Names in Zoology :—

punctipennis Zetterstedt, 1828, as published in the binomen *Aphis punctipennis* (type-species of *Euceraphis* Walker, 1870) ;

COMMENT ON THE PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS THE GENERIC NAME *PROMECOPSIS* DUMÉRIL, 1806. Z.N.(S.) 483

(See Volume 17, pages 191–192.)

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The existence of the generic name *Promecopsis* Duméril, published without a type-species clearly represents a danger to the stability of generic nomenclature within the Typhlocybinae. Therefore I do not hesitate to inform you that I quite agree with Dr. Wagner in this case and that I wish to support his request.